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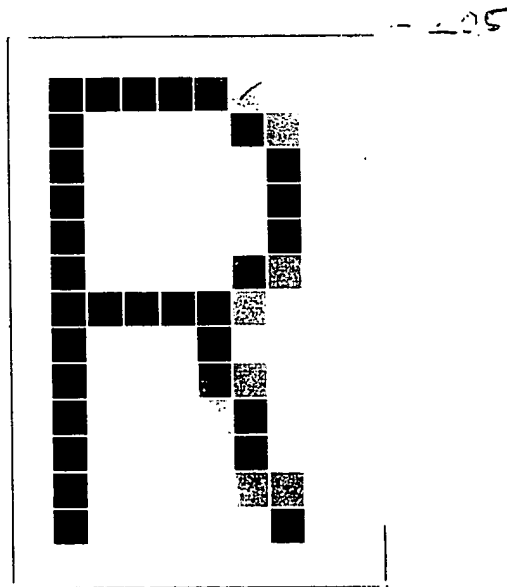
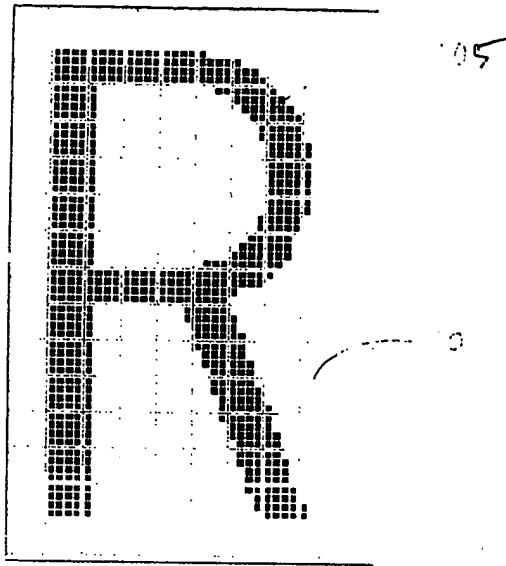
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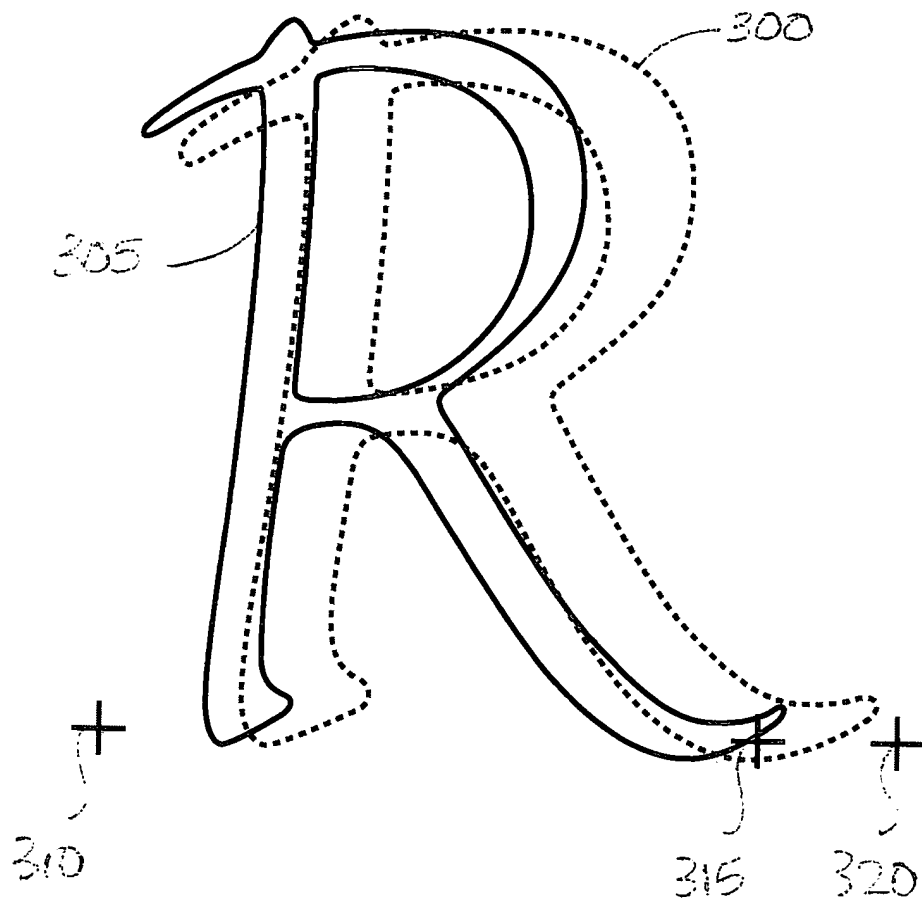


FIG. 3A

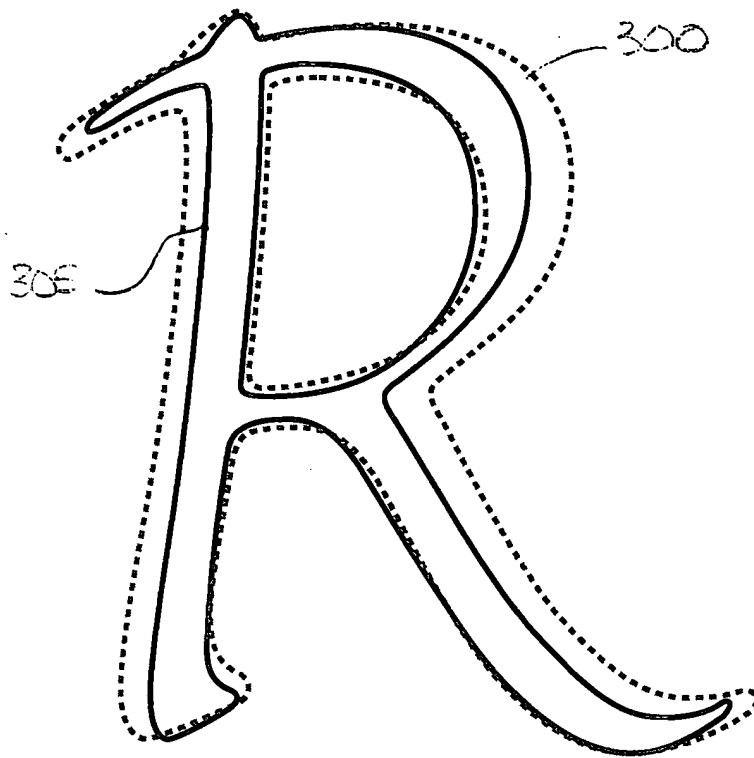
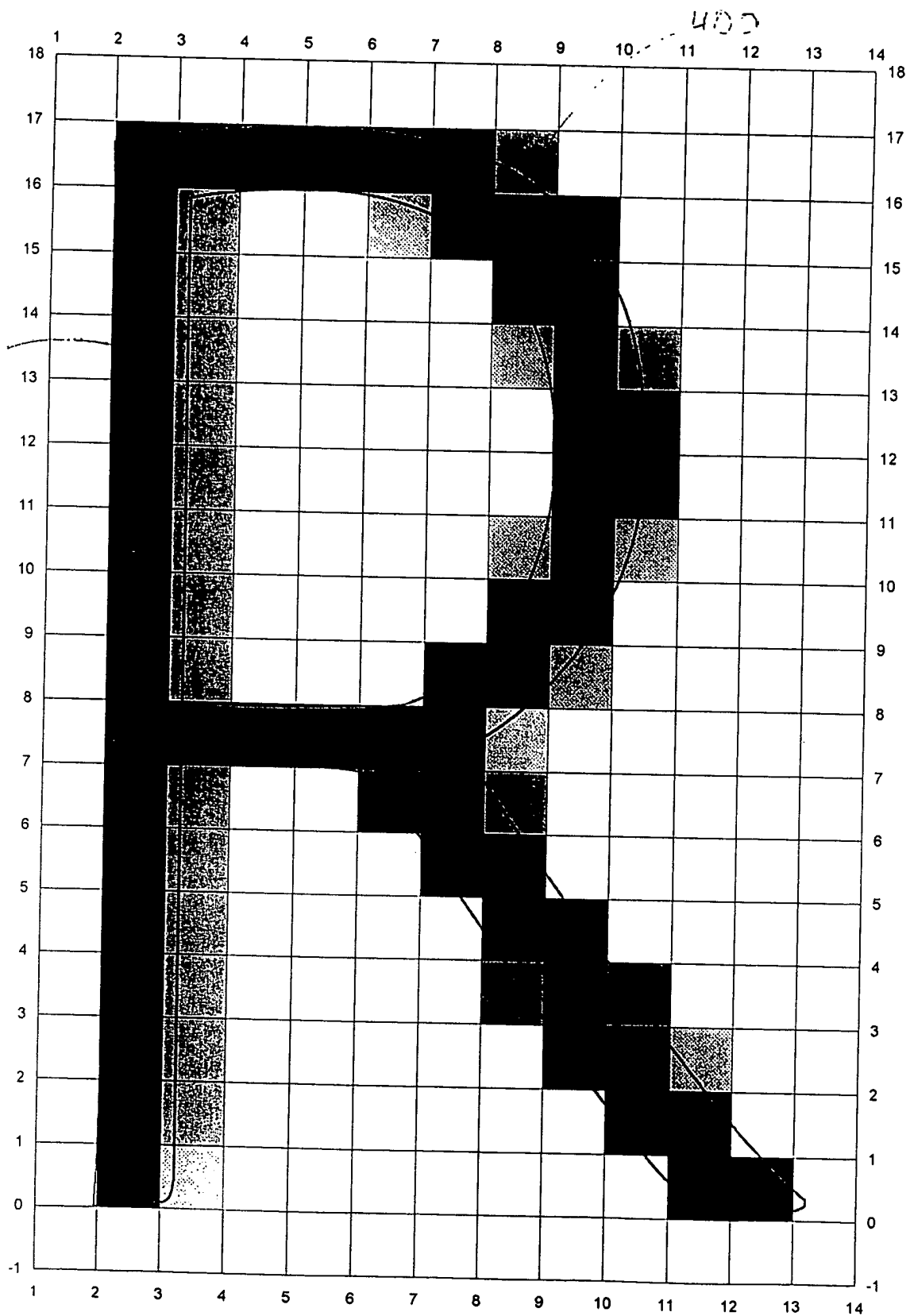


FIG 38



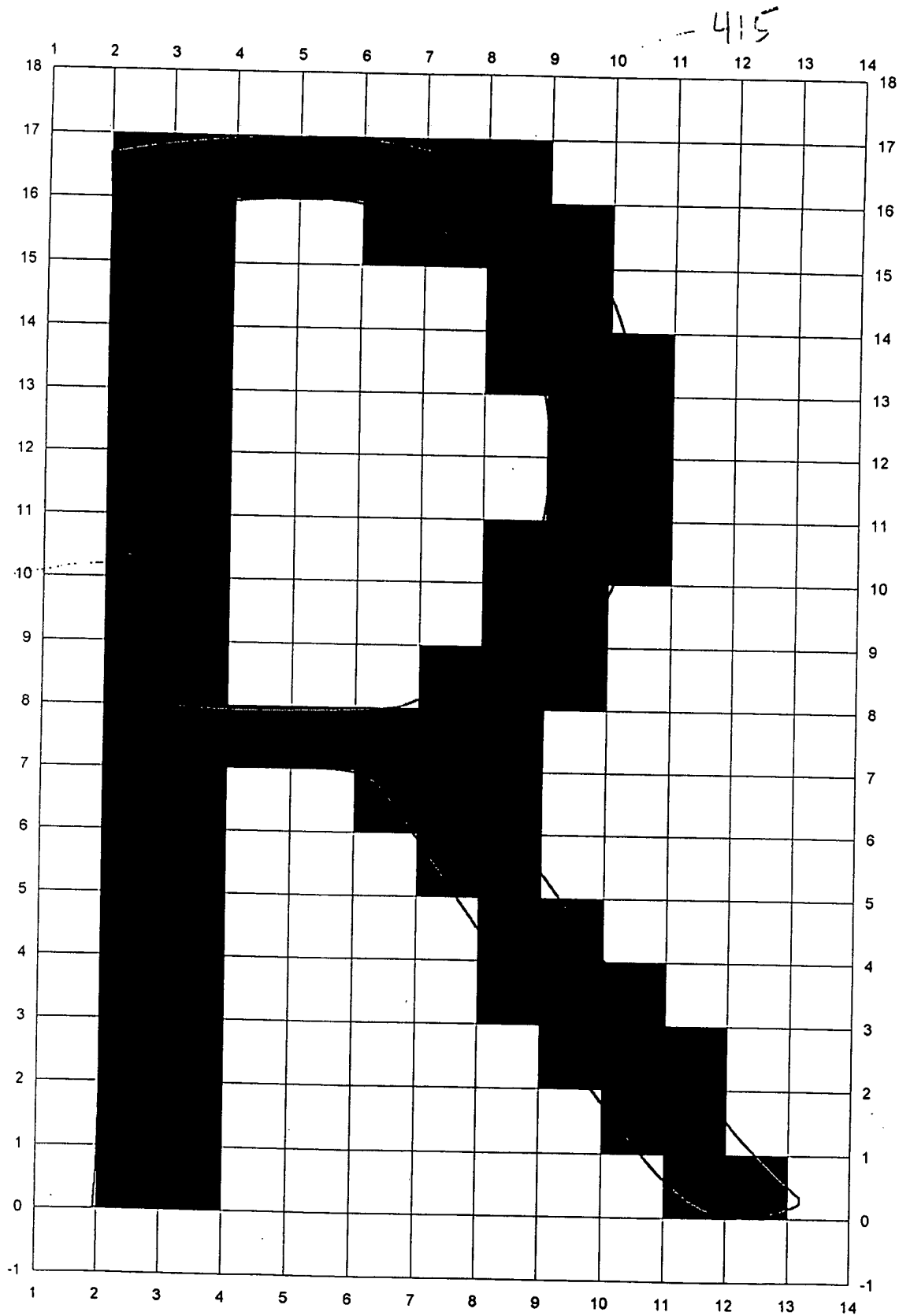


FIG 4E

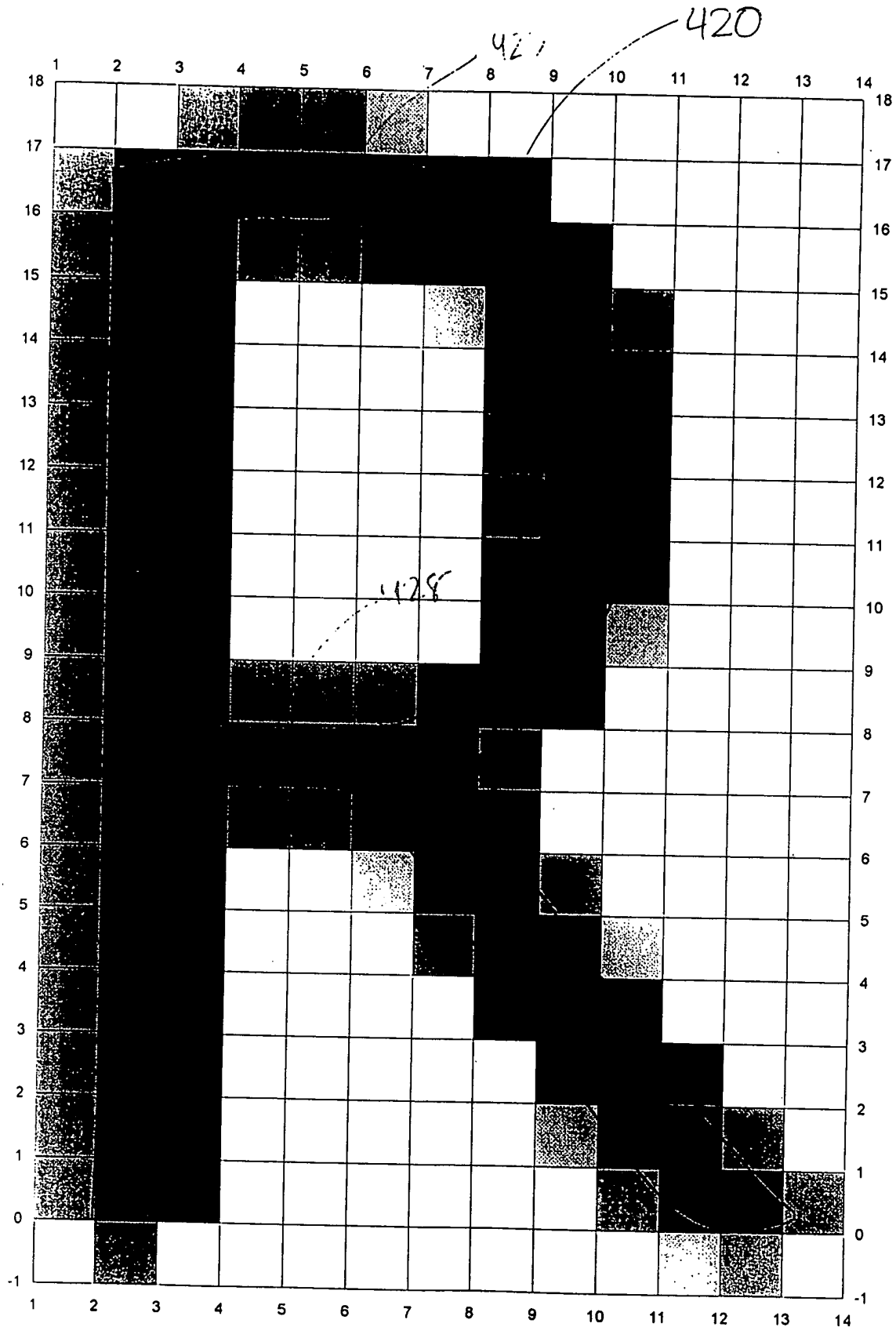


FIG. 4C

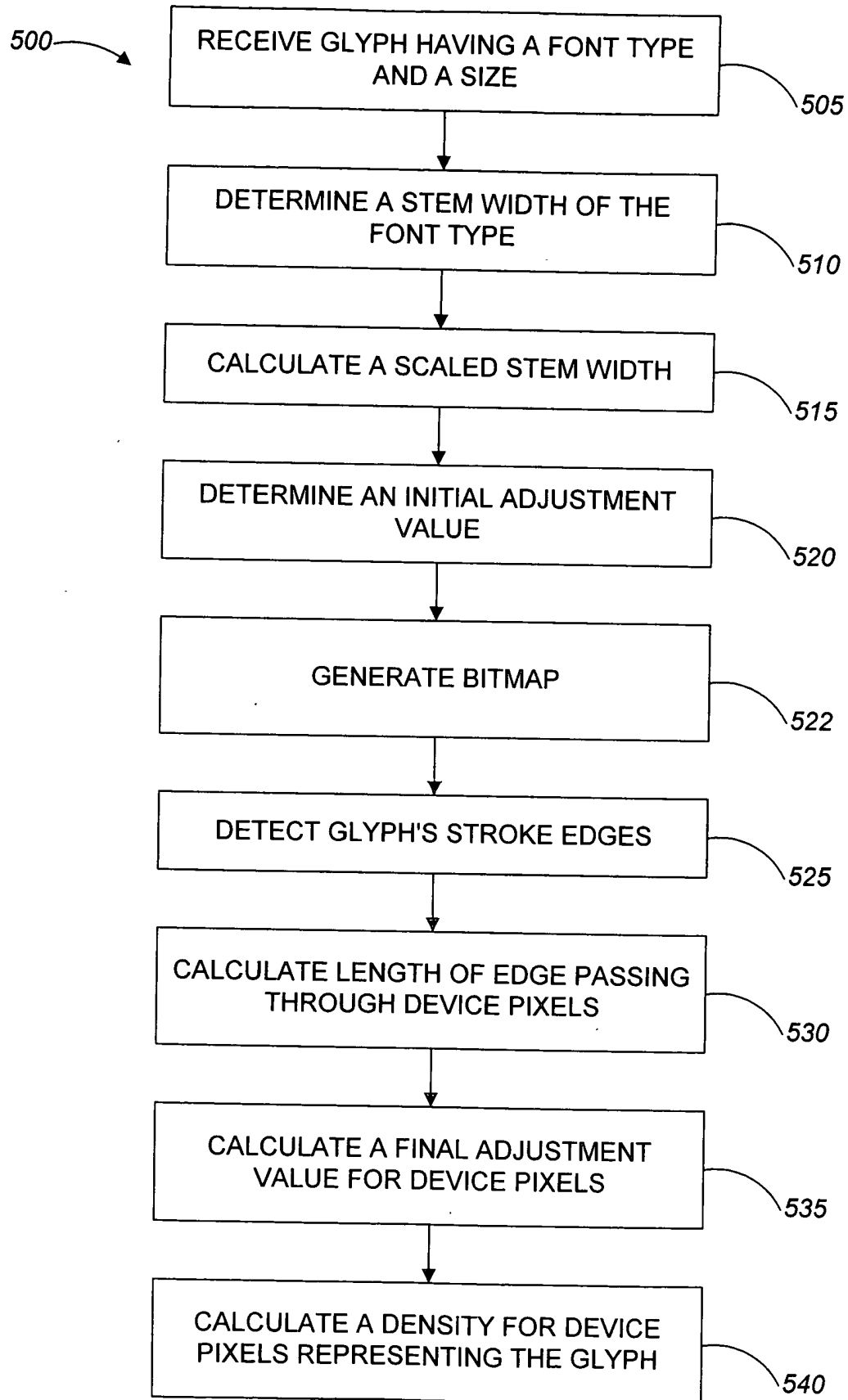


FIG. 5

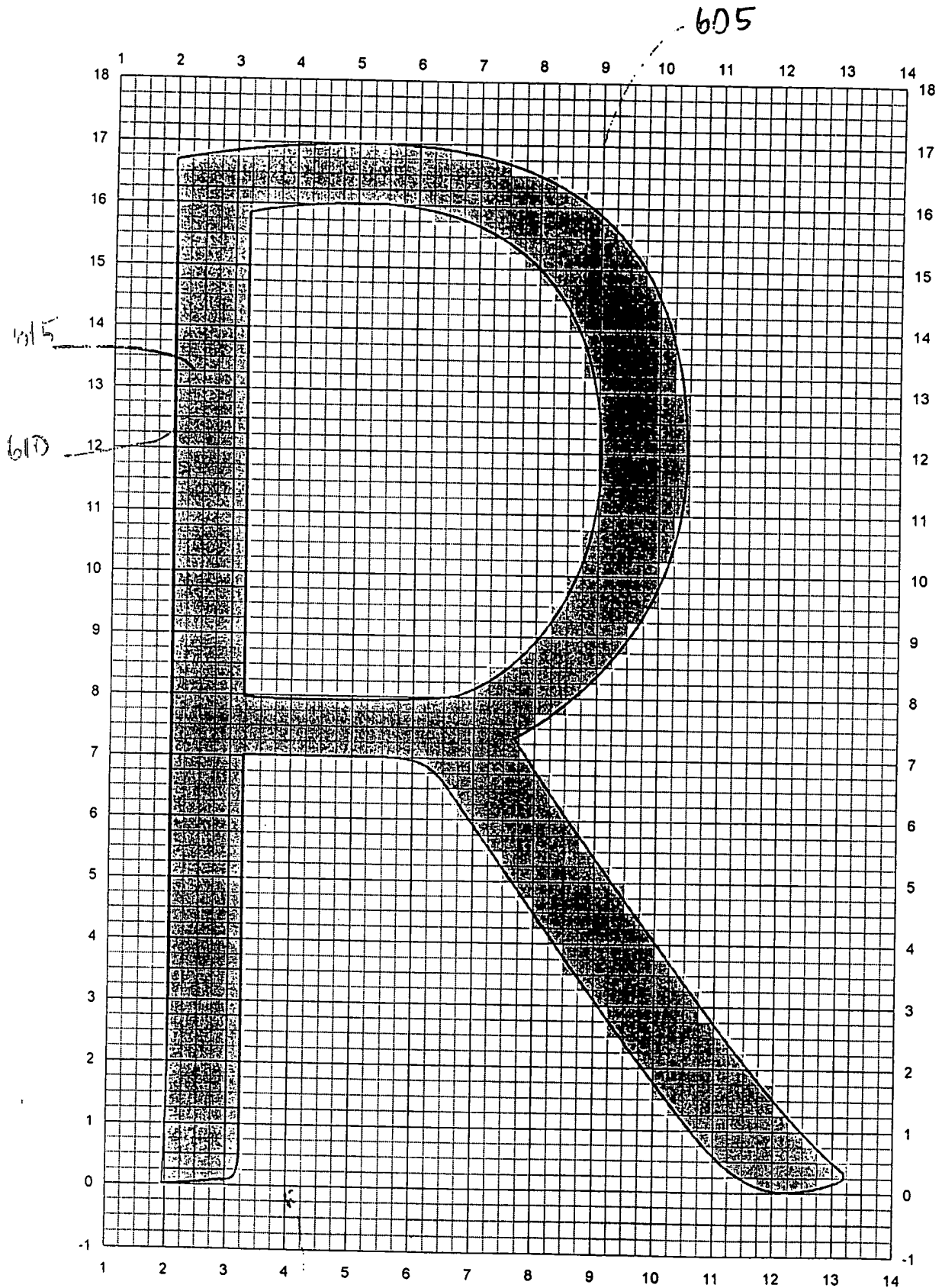


FIG. 6A

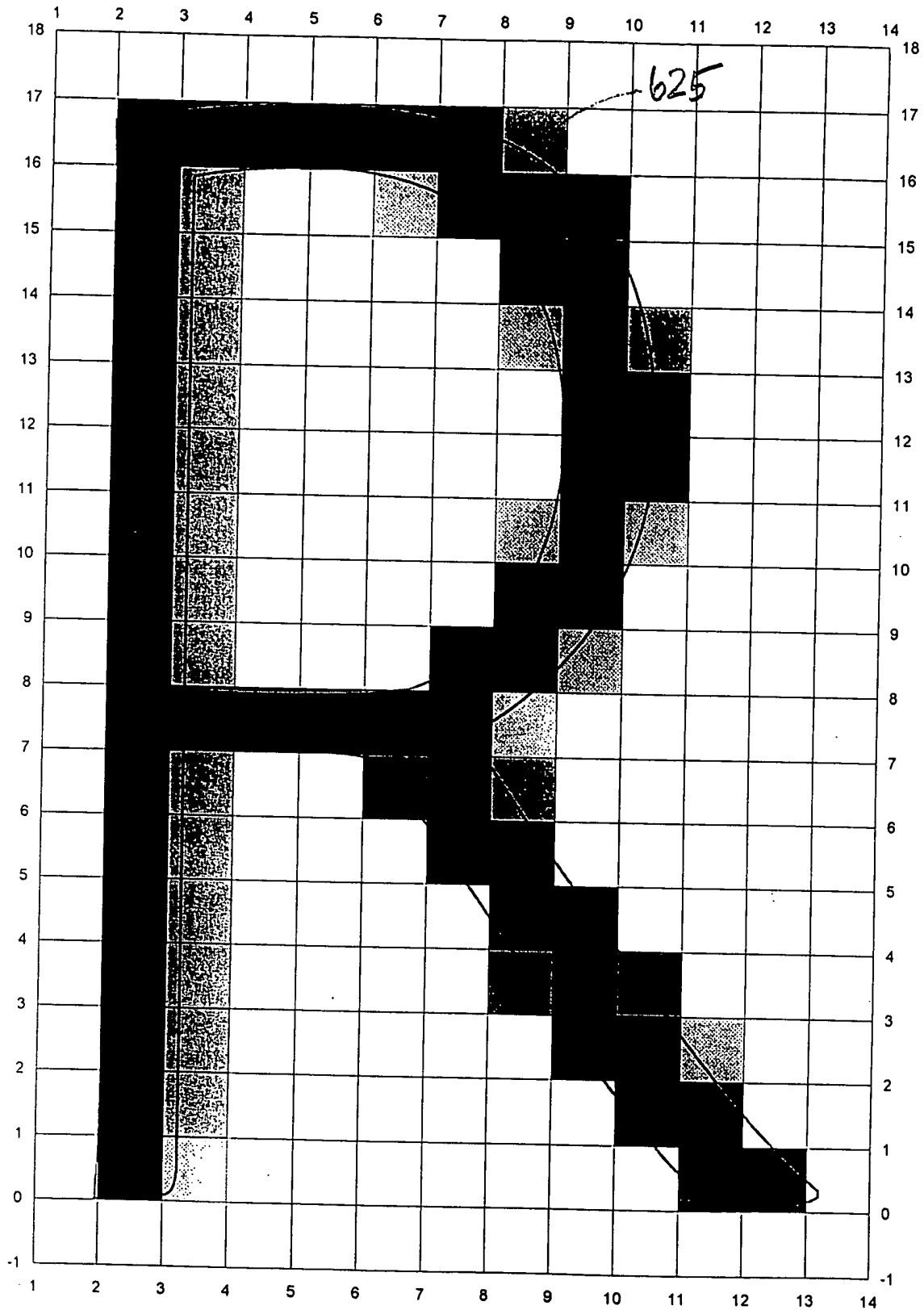


FIG. 6E

630

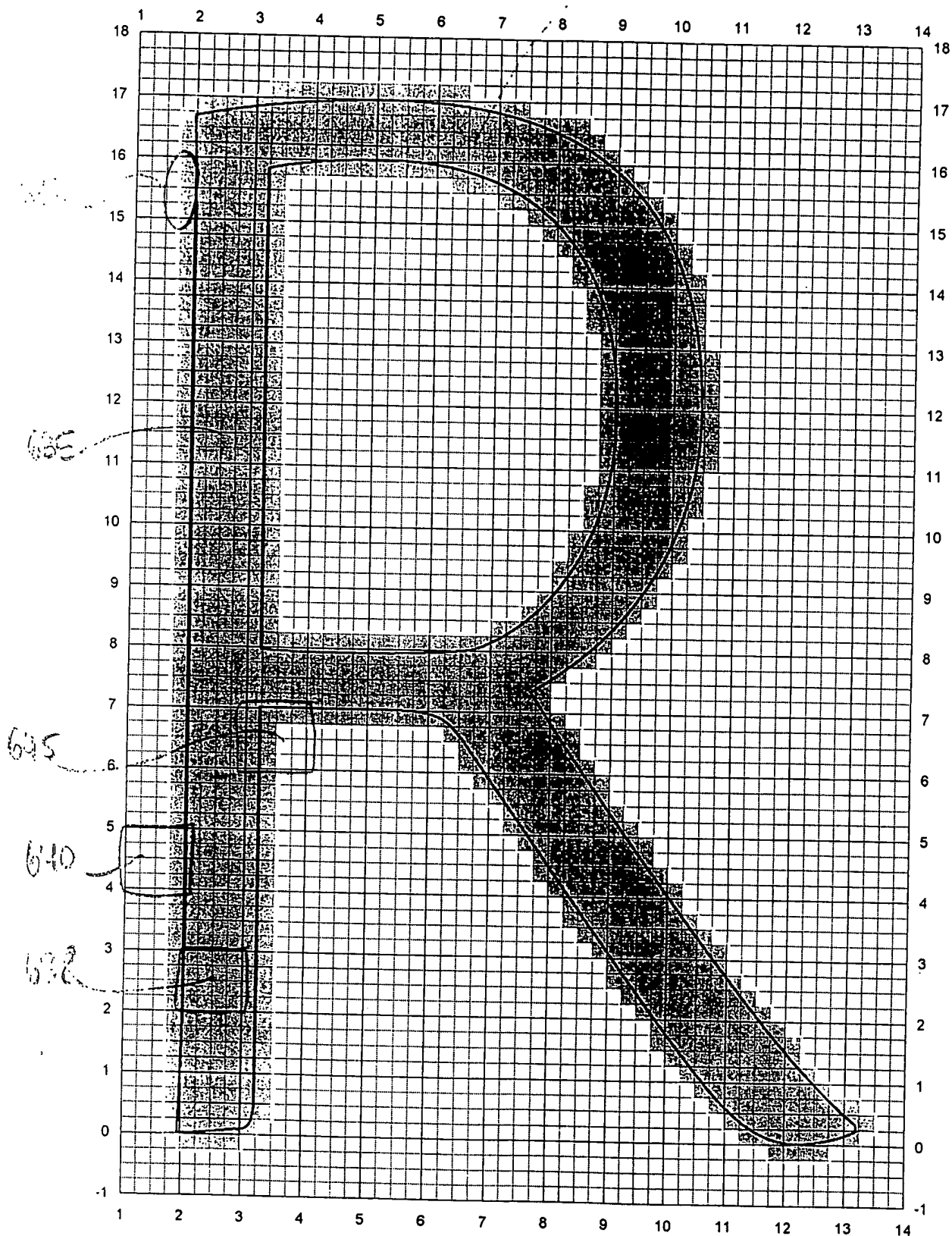


FIG 6C

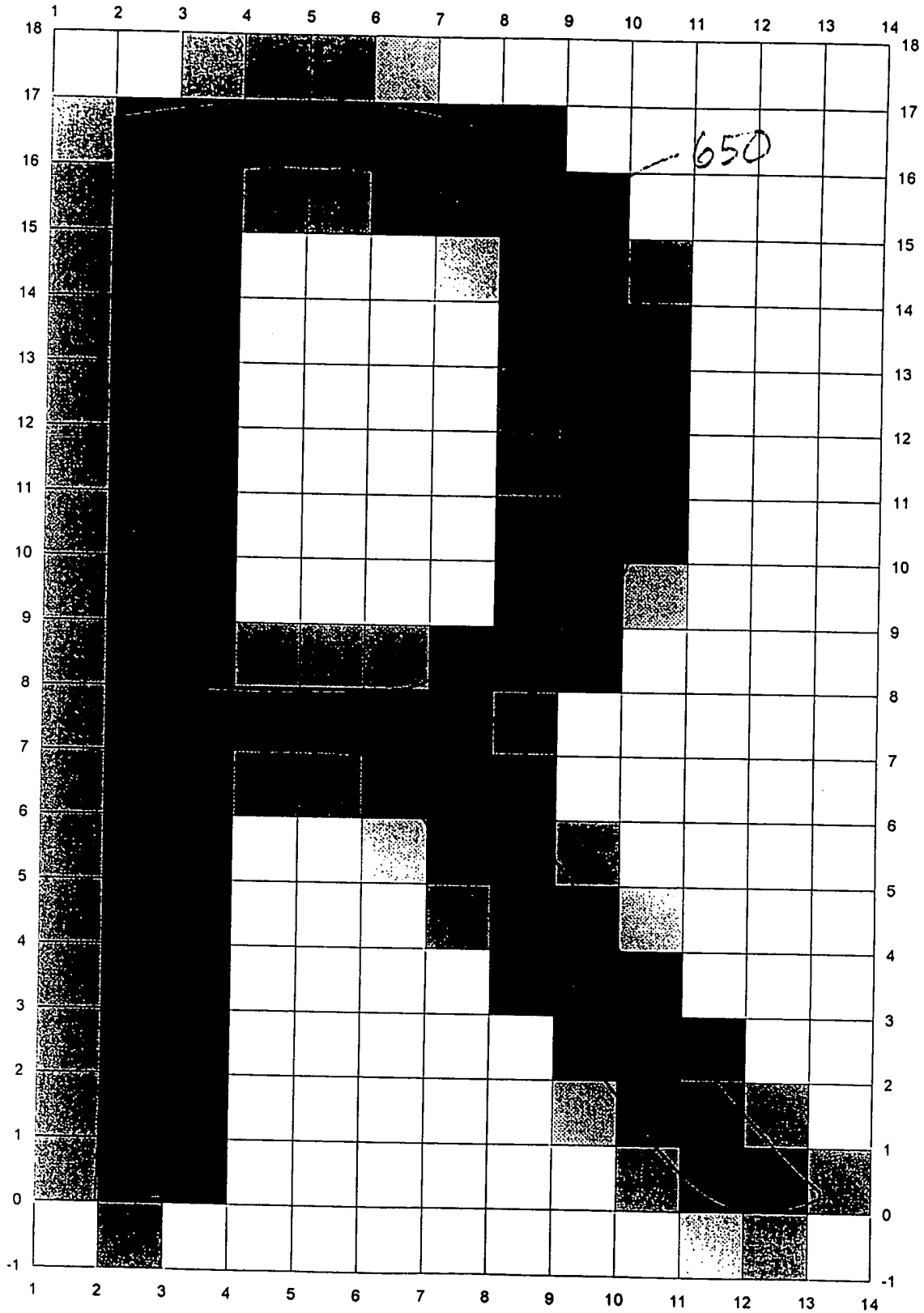


Fig. 6D

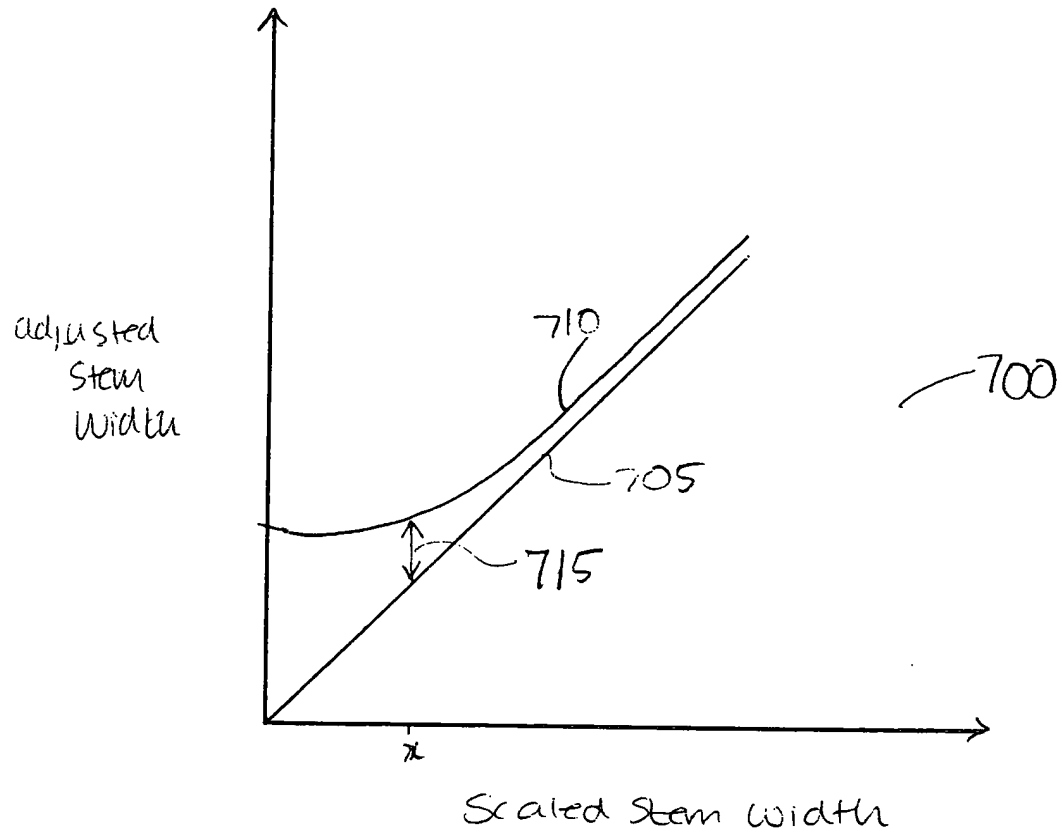


FIG 7A

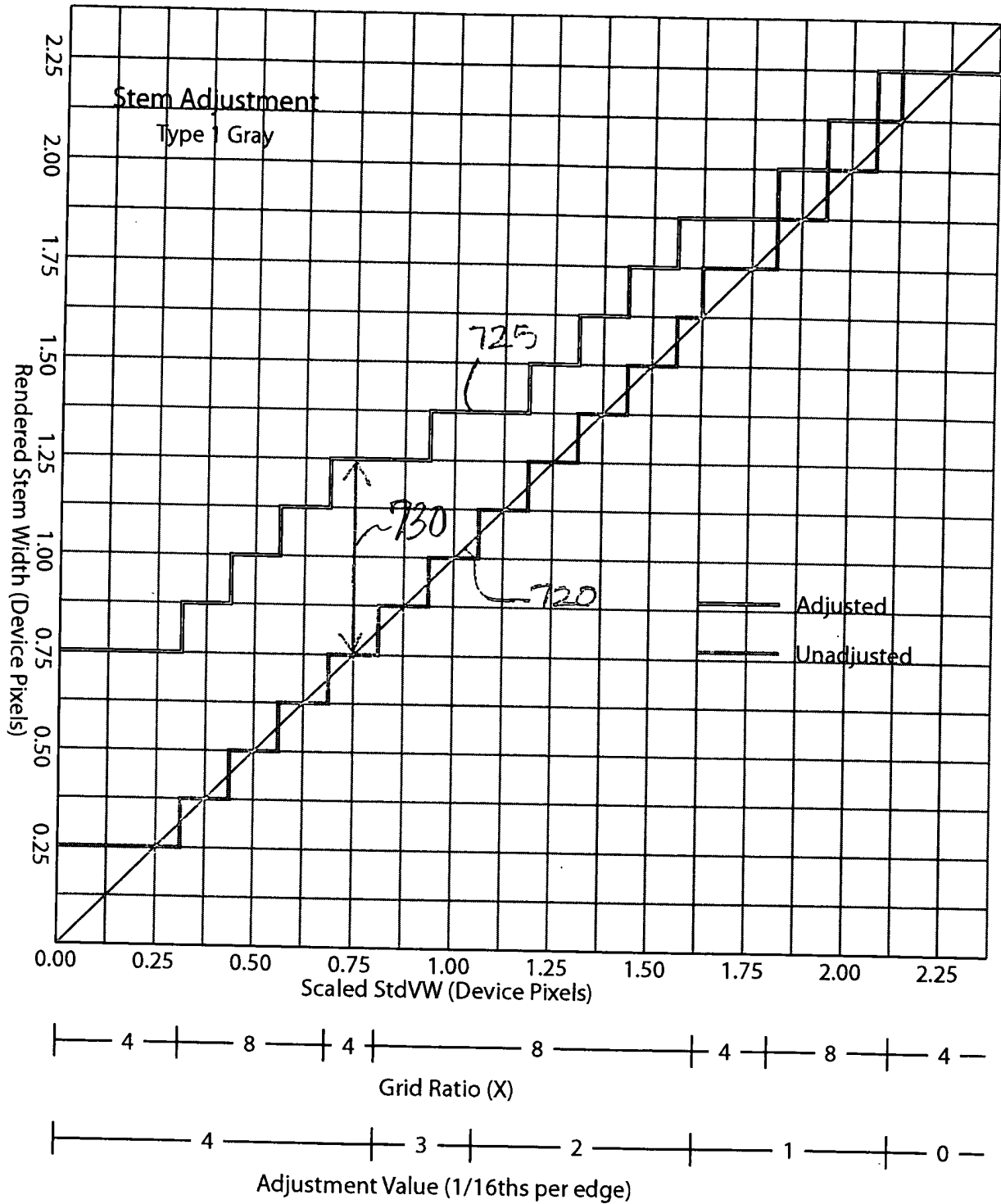


FIG. 7B

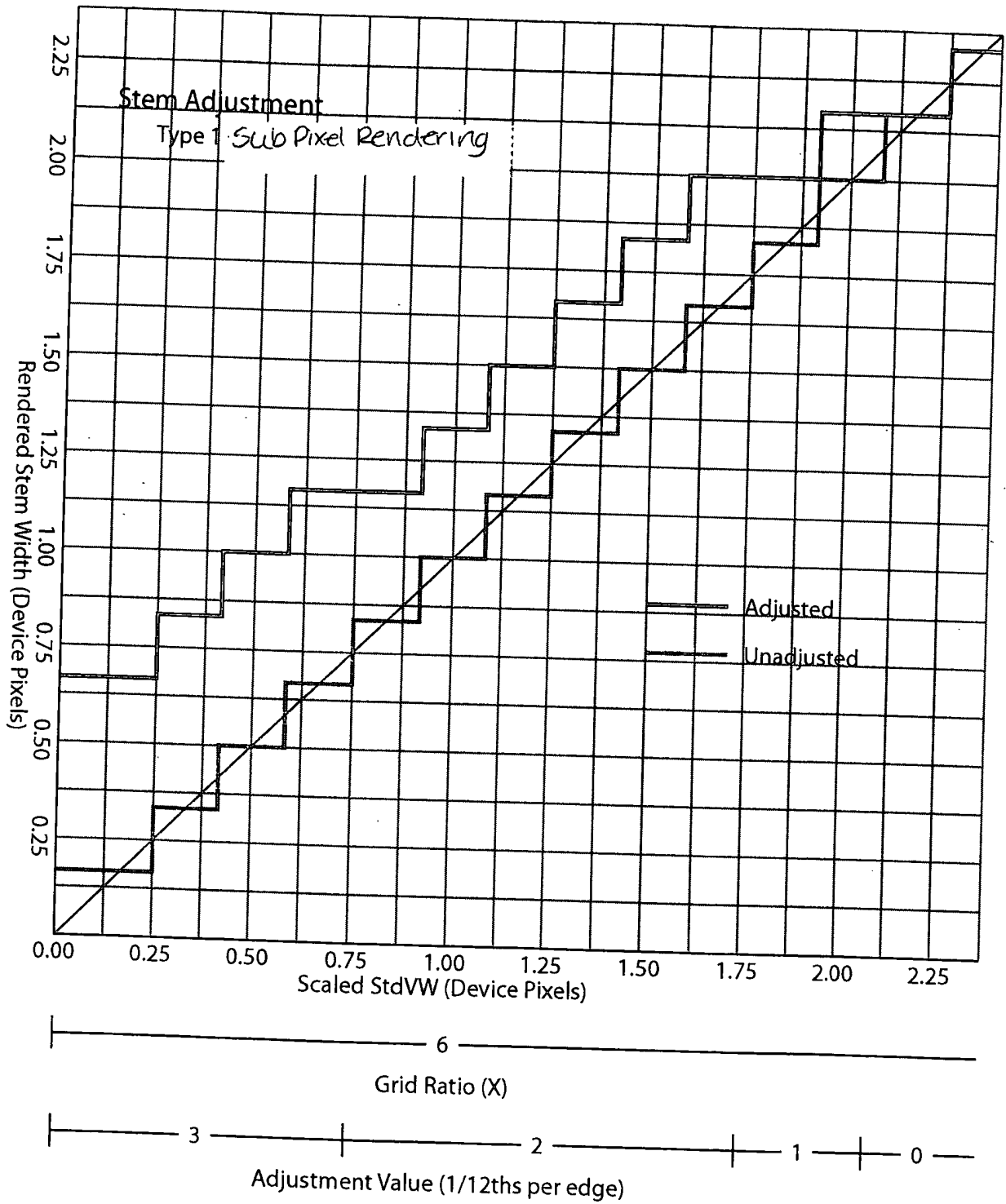


FIG. 7C

Font type: Type 1 Gray Scale

| Scaled Stem Width (1/16 th) | X Grid Ratio | Y Grid Ratio | Hint Grid Ratio | Hinting Policy | X Align. | Y Align. | X Offset Amt. | Y Offset Amt. | X Carry (y/n) | Y Carry (y/n) | Initial Adjustment Value (1/16 th) |
|---|--------------|--------------|-----------------|----------------|----------|----------|---------------|---------------|---------------|---------------|--|
| 0 | 4 | 4 | 4 | Black Edge | 4 | 4 | 0 | 1 | 1 | 1 | 4 |
| 1 | 4 | 4 | 4 | Black Edge | 4 | 4 | 0 | 1 | 1 | 1 | 4 |
| 2 | 4 | 4 | 4 | Black Edge | 4 | 4 | 0 | 1 | 1 | 1 | 4 |
| 3 | 4 | 4 | 4 | Black Edge | 4 | 4 | 0 | 1 | 1 | 1 | 4 |
| 4 | 4 | 4 | 4 | Black Edge | 4 | 4 | 0 | 1 | 1 | 1 | 4 |
| 5 | 8 | 8 | 8 | Black Edge | 8 | 8 | 0 | 1 | 1 | 1 | 4 |
| 6 | 8 | 8 | 8 | Black Edge | 8 | 8 | 0 | 1 | 1 | 1 | 4 |
| 7 | 8 | 8 | 8 | Black Edge | 8 | 8 | 0 | 1 | 1 | 1 | 4 |
| 8 | 8 | 8 | 8 | Black Edge | 8 | 8 | 0 | 1 | 1 | 1 | 4 |
| 9 | 8 | 8 | 8 | Black Edge | 8 | 8 | 0 | 1 | 1 | 1 | 4 |
| 10 | 8 | 8 | 8 | Black Edge | 8 | 8 | 0 | 1 | 1 | 1 | 4 |
| 11 | 4 | 4 | 4 | Black Edge | 4 | 4 | 1 | 1 | 1 | 0 | 4 |
| 12 | 4 | 4 | 4 | Black Edge | 4 | 4 | 1 | 1 | 1 | 0 | 4 |
| 13 | 8 | 8 | 8 | Black Edge | 8 | 8 | 1 | 1 | 1 | 1 | 3 |
| 14 | 8 | 8 | 8 | Black Edge | 8 | 8 | 1 | 1 | 1 | 1 | 3 |
| 15 | 8 | 8 | 8 | Black Edge | 8 | 8 | 1 | 1 | 1 | 1 | 3 |
| 16 | 8 | 8 | 8 | Black Edge | 8 | 8 | 1 | 1 | 1 | 1 | 3 |
| 17 | 8 | 8 | 8 | Black Edge | 8 | 8 | 1 | 1 | 1 | 1 | 2 |
| 18 | 8 | 8 | 8 | Black Edge | 8 | 8 | 1 | 1 | 1 | 1 | 2 |
| 19 | 8 | 8 | 8 | Black Edge | 8 | 8 | 1 | 1 | 1 | 1 | 2 |
| 20 | 8 | 8 | 8 | Black Edge | 8 | 8 | 1 | 1 | 1 | 1 | 2 |
| 21 | 8 | 8 | 8 | Black Edge | 8 | 8 | 1 | 1 | 1 | 1 | 2 |
| 22 | 8 | 8 | 8 | Black Edge | 8 | 8 | 1 | 1 | 1 | 1 | 2 |
| 23 | 8 | 8 | 8 | Black Edge | 8 | 8 | 1 | 1 | 1 | 1 | 2 |
| 24 | 8 | 8 | 8 | Black Edge | 8 | 8 | 1 | 1 | 1 | 1 | 2 |

FIG. 8A

| Scaled Stem Width (1/16 th) | X Grid Ratio | Y Grid Ratio | Hint Grid Ratio | Hinting Policy | X Align. | Y Align. | X Offset Amt. | Y Offset Amt. | X Carry (y/n) | Y Carry (y/n) | Initial Adjustment Value (1/16 th) |
|---|--------------|--------------|-----------------|----------------|----------|----------|---------------|---------------|---------------|---------------|--|
| 25 | 8 | 8 | 8 | Black Edge | 8 | 8 | 1 | 1 | 1 | 1 | 2 |
| 26 | 4 | 4 | 4 | Black Edge | 4 | 4 | 0 | 0 | 1 | 0 | 1 |
| 27 | 4 | 4 | 4 | Black Edge | 4 | 4 | 0 | 0 | 1 | 0 | 1 |
| 28 | 4 | 4 | 4 | Black Edge | 4 | 4 | 0 | 0 | 1 | 0 | 1 |
| 29 | 8 | 8 | 8 | Black Edge | 8 | 8 | 1 | 1 | 1 | 1 | 1 |
| 30 | 8 | 8 | 8 | Black Edge | 8 | 8 | 1 | 1 | 1 | 1 | 1 |
| 31 | 8 | 8 | 8 | Black Edge | 8 | 8 | 1 | 1 | 1 | 1 | 1 |
| 32 | 8 | 8 | 8 | Black Edge | 8 | 8 | 1 | 1 | 1 | 1 | 1 |
| 33 | 8 | 8 | 8 | Black Edge | 8 | 8 | 1 | 1 | 1 | 1 | 1 |
| 34 | 4 | 4 | 4 | Black Edge | 4 | 4 | 0 | 0 | 1 | 0 | 0 |
| 35 | 4 | 4 | 4 | Black Edge | 4 | 4 | 0 | 0 | 1 | 0 | 0 |
| 36 | 4 | 4 | 4 | Black Edge | 4 | 4 | 0 | 0 | 1 | 0 | 0 |
| 37 | 4 | 4 | 4 | Black Edge | 4 | 4 | 0 | 0 | 1 | 0 | 0 |

FIG. 8A cont'd

Font type: Type 1 Gray Scale

| Scaled Stem Width (1/16ths) | Asymmetric Adjusting (y/n) | Low Density | Low Initial Adjustment Value (1/16ths) | High Density | High Initial Adjustment Value (1/16ths) |
|-----------------------------|----------------------------|-------------|--|--------------|---|
| 0 | 0 | 0 | 0 | 0 | 0 |
| 1 | 0 | 0 | 0 | 0 | 0 |
| 2 | 0 | 0 | 0 | 0 | 0 |
| 3 | 0 | 0 | 0 | 0 | 0 |
| 4 | 0 | 0 | 0 | 0 | 0 |
| 5 | 1 | 0 | 2 | 24 | 6 |
| 6 | 1 | 0 | 2 | 24 | 6 |
| 7 | 1 | 0 | 2 | 32 | 6 |
| 8 | 1 | 0 | 2 | 32 | 6 |
| 9 | 1 | 0 | 2 | 40 | 6 |
| 10 | 1 | 0 | 2 | 40 | 6 |
| 11 | 0 | 0 | 0 | 0 | 0 |
| 12 | 0 | 0 | 0 | 0 | 0 |
| 13 | 1 | 0 | 4 | 56 | 2 |
| 14 | 1 | 0 | 4 | 56 | 2 |
| 15 | 1 | 8 | 4 | 56 | 2 |
| 16 | 1 | 8 | 4 | 56 | 2 |
| 17 | 0 | 0 | 0 | 0 | 0 |
| 18 | 0 | 0 | 0 | 0 | 0 |
| 19 | 0 | 0 | 0 | 0 | 0 |
| 20 | 0 | 0 | 0 | 0 | 0 |
| 21 | 0 | 0 | 0 | 0 | 0 |
| 22 | 0 | 0 | 0 | 0 | 0 |
| 23 | 0 | 0 | 0 | 0 | 0 |

FIG. 8B

| Scaled Stem Width (1/16ths) | Asymmetric Adjusting (y/n) | Low Density | Low Initial Adjustment Value (1/16ths) | High Density | High Initial Adjustment Value (1/16ths) |
|-----------------------------|----------------------------|-------------|--|--------------|---|
| 24 | 0 | 0 | 0 | 0 | 0 |
| 25 | 0 | 0 | 0 | 0 | 0 |
| 26 | 1 | 0 | 0 | 12 | 2 |
| 27 | 1 | 0 | 0 | 12 | 2 |
| 28 | 1 | 0 | 0 | 12 | 2 |
| 29 | 1 | 0 | 2 | 56 | 0 |
| 30 | 1 | 0 | 2 | 56 | 0 |
| 31 | 1 | 8 | 0 | 56 | 2 |
| 32 | 1 | 8 | 0 | 56 | 2 |
| 33 | 1 | 16 | 0 | 56 | 2 |
| 34 | 0 | 0 | 0 | 0 | 0 |
| 35 | 0 | 0 | 0 | 0 | 0 |
| 36 | 0 | 0 | 0 | 0 | 0 |
| 37 | 0 | 0 | 0 | 0 | 0 |

FIG. 8B cont'd

Font Type: Type 1 Sub Pixel Rendering

| Scaled Stem Width (1/6ths) | X Grid Ratio | Y Grid Ratio | Hint Grid Ratio | X Align. | Y Align. | X Offset Amt. | Y Offset Amt. | X Carry (y/n) | Y Carry (y/n) | Hinting Policy | Initial Adjustment Value (1/6ths) |
|----------------------------|--------------|--------------|-----------------|----------|----------|---------------|---------------|---------------|---------------|----------------|-----------------------------------|
| 0 | 6 | 6 | 6 | 1 | 6 | 0 | 0 | 1 | 0 | Black Edge | 3 |
| 1 | 6 | 6 | 6 | 1 | 6 | 0 | 0 | 1 | 0 | Black Edge | 3 |
| 2 | 6 | 6 | 6 | 1 | 6 | 0 | 0 | 1 | 0 | Black Edge | 3 |
| 3 | 6 | 6 | 6 | 1 | 6 | 0 | 0 | 1 | 0 | Black Edge | 3 |
| 4 | 6 | 6 | 6 | 1 | 6 | 0 | 0 | 1 | 0 | Black Edge | 3 |
| 5 | 6 | 6 | 6 | 1 | 6 | 0 | 0 | 1 | 0 | Black Edge | 3 |
| 6 | 6 | 6 | 6 | 1 | 6 | 0 | 0 | 1 | 0 | Black Edge | 2 |
| 7 | 6 | 6 | 6 | 1 | 6 | 0 | 0 | 1 | 0 | Black Edge | 2 |
| 8 | 6 | 6 | 6 | 1 | 6 | 0 | 0 | 1 | 0 | Black Edge | 2 |
| 9 | 6 | 6 | 6 | 1 | 6 | 0 | 0 | 1 | 0 | Black Edge | 2 |
| 10 | 6 | 6 | 6 | 1 | 6 | 0 | 0 | 1 | 0 | Black Edge | 2 |
| 11 | 6 | 6 | 6 | 1 | 6 | 0 | 0 | 1 | 0 | Black Edge | 2 |
| 12 | 6 | 6 | 6 | 1 | 6 | 0 | 0 | 1 | 0 | Black Edge | 1 |
| 13 | 6 | 6 | 6 | 1 | 6 | 0 | 0 | 1 | 0 | Black Edge | 1 |
| | | | | | | | | | | Black Edge | 0 |

FIG. 8C

Font Type: TrueType Gray Scale

| Scaled Stem Width (1/4ths) | X Grid Ratio | Y Grid Ratio | Hint Grid Ratio | X Align. | Y Align. | X Offset Amt. | Y Offset Amt. | X Carry (y/n) | Y Carry (y/n) | Hinting Policy | Initial Adjustment Value (1/4ths) |
|----------------------------|--------------|--------------|-----------------|----------|----------|---------------|---------------|---------------|---------------|----------------|-----------------------------------|
| 0 | 4 | 4 | 4 | 0 | 0 | 0 | 0 | 1 | 1 | No Smoothing | 4 |
| 1 | 4 | 4 | 4 | 0 | 0 | 0 | 0 | 1 | 1 | No Smoothing | 4 |
| 2 | 4 | 4 | 4 | 0 | 0 | 0 | 0 | 1 | 1 | No Smoothing | 4 |
| 3 | 4 | 4 | 4 | 0 | 0 | 0 | 0 | 1 | 1 | No Smoothing | 3 |
| 4 | 4 | 4 | 4 | 0 | 0 | 0 | 0 | 1 | 1 | No Smoothing | 2 |
| 5 | 4 | 4 | 4 | 0 | 0 | 0 | 0 | 1 | 1 | No Smoothing | 2 |
| 6 | 4 | 4 | 4 | 0 | 0 | 0 | 0 | 1 | 1 | No Smoothing | 1 |
| 7 | 4 | 4 | 4 | 0 | 0 | 0 | 0 | 1 | 1 | No Smoothing | 1 |
| 8 | 4 | 4 | 4 | 0 | 0 | 0 | 0 | 1 | 1 | No Smoothing | 1 |
| 9 | 4 | 4 | 4 | 0 | 0 | 0 | 0 | 1 | 1 | No Smoothing | 0 |

FIG. 8D

Font Type: TrueType SubPixel Rendering

| Scaled Stem Width (1/6ths) | X Grid Ratio | Y Grid Ratio | Hint Grid Ratio | X Align. | Y Align. | X Offset Amt. | Y Offset Amt. | X Carry (y/n) | Y Carry (y/n) | Hinting Policy | Initial Adjustment Value (1/6ths) |
|----------------------------|--------------|--------------|-----------------|----------|----------|---------------|---------------|---------------|---------------|----------------|-----------------------------------|
| 0 | 6 | 6 | 6 | 0 | 0 | 0 | 0 | 1 | 1 | No Smoothing | 3 |
| 1 | 6 | 6 | 6 | 0 | 0 | 0 | 0 | 1 | 1 | No Smoothing | 3 |
| 2 | 6 | 6 | 6 | 0 | 0 | 0 | 0 | 1 | 1 | No Smoothing | 3 |
| 3 | 6 | 6 | 6 | 0 | 0 | 0 | 0 | 1 | 1 | No Smoothing | 3 |
| 4 | 6 | 6 | 6 | 0 | 0 | 0 | 0 | 1 | 1 | No Smoothing | 3 |
| 5 | 6 | 6 | 6 | 0 | 0 | 0 | 0 | 1 | 1 | No Smoothing | 3 |
| 6 | 6 | 6 | 6 | 0 | 0 | 0 | 0 | 1 | 1 | No Smoothing | 2 |
| 7 | 6 | 6 | 6 | 0 | 0 | 0 | 0 | 1 | 1 | No Smoothing | 2 |
| 8 | 6 | 6 | 6 | 0 | 0 | 0 | 0 | 1 | 1 | No Smoothing | 2 |
| 9 | 6 | 6 | 6 | 0 | 0 | 0 | 0 | 1 | 1 | No Smoothing | 2 |
| 10 | 6 | 6 | 6 | 0 | 0 | 0 | 0 | 1 | 1 | No Smoothing | 2 |
| 11 | 6 | 6 | 6 | 0 | 0 | 0 | 0 | 1 | 1 | No Smoothing | 1 |
| 12 | 6 | 6 | 6 | 0 | 0 | 0 | 0 | 1 | 1 | No Smoothing | 1 |
| 13 | 6 | 6 | 6 | 0 | 0 | 0 | 0 | 1 | 1 | No Smoothing | 0 |

FIG. 8E

Font Type: TrueType Gray Scale

932 932

| Scaled Stem Width (1/8ths) | X Grid Ratio | Y Grid Ratio | Hint Grid Ratio | X Align. | Y Align. | X Offset Amt. | Y Offset Amt. | X Carry (y/n) | Y Carry (y/n) | Hinting Policy | Initial Adjustment Value (1/8ths) |
|----------------------------|--------------|--------------|-----------------|----------|----------|---------------|---------------|---------------|---------------|----------------|-----------------------------------|
| 0 | 8 | 2 | 8 | 1 | 4 | 0 | 0 | 1 | 0 | Anisotropic | 3 |
| 1 | 8 | 2 | 8 | 1 | 4 | 0 | 0 | 1 | 0 | Anisotropic | 3 |
| 2 | 8 | 2 | 8 | 1 | 4 | 0 | 0 | 1 | 0 | Anisotropic | 3 |
| 3 | 8 | 2 | 8 | 1 | 4 | 0 | 0 | 1 | 0 | Anisotropic | 3 |
| 4 | 8 | 2 | 8 | 1 | 4 | 0 | 0 | 1 | 0 | Anisotropic | 3 |
| 5 | 8 | 2 | 8 | 1 | 4 | 0 | 0 | 1 | 0 | Anisotropic | 3 |
| 6 | 8 | 2 | 8 | 1 | 4 | 0 | 0 | 1 | 0 | Anisotropic | 2 |
| 7 | 8 | 2 | 8 | 1 | 4 | 0 | 0 | 1 | 0 | Anisotropic | 2 |
| 8 | 8 | 2 | 8 | 1 | 4 | 0 | 0 | 1 | 0 | Anisotropic | 2 |
| 9 | 8 | 2 | 8 | 1 | 4 | 0 | 0 | 1 | 0 | Anisotropic | 2 |
| 10 | 8 | 2 | 8 | 1 | 4 | 0 | 0 | 1 | 0 | Anisotropic | 2 |
| 11 | 8 | 2 | 8 | 1 | 4 | 0 | 0 | 1 | 0 | Anisotropic | 1 |
| 12 | 8 | 2 | 8 | 1 | 4 | 0 | 0 | 1 | 0 | Anisotropic | 1 |
| 13 | 8 | 2 | 8 | 1 | 4 | 0 | 0 | 1 | 0 | Anisotropic | 1 |
| 14 | 8 | 2 | 8 | 1 | 4 | 0 | 0 | 1 | 0 | Anisotropic | 1 |
| 15 | 8 | 2 | 8 | 1 | 4 | 0 | 0 | 1 | 0 | Anisotropic | 1 |
| 16 | 8 | 2 | 8 | 1 | 4 | 0 | 0 | 1 | 0 | Anisotropic | 1 |
| 17 | 8 | 2 | 8 | 1 | 4 | 0 | 0 | 1 | 0 | Anisotropic | 1 |
| 18 | 8 | 2 | 8 | 1 | 4 | 0 | 0 | 1 | 0 | Anisotropic | 0 |

FIG. 8F

Font Type: TrueType Sub Pixel Rendering

| Scaled Stem Width (1/6ths) | X Grid Ratio | Y Grid Ratio | Hint Grid Ratio | X Align. | Y Align. | X Offset Amt. | Y Offset Amt. | X Carry (y/n) | Y Carry (y/n) | Hinting Policy | Initial Adjustment Value (1/6ths) |
|----------------------------|--------------|--------------|-----------------|----------|----------|---------------|---------------|---------------|---------------|----------------|-----------------------------------|
| 0 | 6 | 6 | 6 | 1 | 6 | 0 | 0 | 1 | 0 | Anisotropic | 3 |
| 1 | 6 | 6 | 6 | 1 | 6 | 0 | 0 | 1 | 0 | Anisotropic | 3 |
| 2 | 6 | 6 | 6 | 1 | 6 | 0 | 0 | 1 | 0 | Anisotropic | 3 |
| 3 | 6 | 6 | 6 | 1 | 6 | 0 | 0 | 1 | 0 | Anisotropic | 3 |
| 4 | 6 | 6 | 6 | 1 | 6 | 0 | 0 | 1 | 0 | Anisotropic | 3 |
| 5 | 6 | 6 | 6 | 1 | 6 | 0 | 0 | 1 | 0 | Anisotropic | 3 |
| 6 | 6 | 6 | 6 | 1 | 6 | 0 | 0 | 1 | 0 | Anisotropic | 2 |
| 7 | 6 | 6 | 6 | 1 | 6 | 0 | 0 | 1 | 0 | Anisotropic | 2 |
| 8 | 6 | 6 | 6 | 1 | 6 | 0 | 0 | 1 | 0 | Anisotropic | 2 |
| 9 | 6 | 6 | 6 | 1 | 6 | 0 | 0 | 1 | 0 | Anisotropic | 2 |
| 10 | 6 | 6 | 6 | 1 | 6 | 0 | 0 | 1 | 0 | Anisotropic | 2 |
| 11 | 6 | 6 | 6 | 1 | 6 | 0 | 0 | 1 | 0 | Anisotropic | 2 |
| 12 | 6 | 6 | 6 | 1 | 6 | 0 | 0 | 1 | 0 | Anisotropic | 1 |
| 13 | 6 | 6 | 6 | 1 | 6 | 0 | 0 | 1 | 0 | Anisotropic | 1 |
| | | | | | | | | | | Anisotropic | 0 |

FIG. 8G

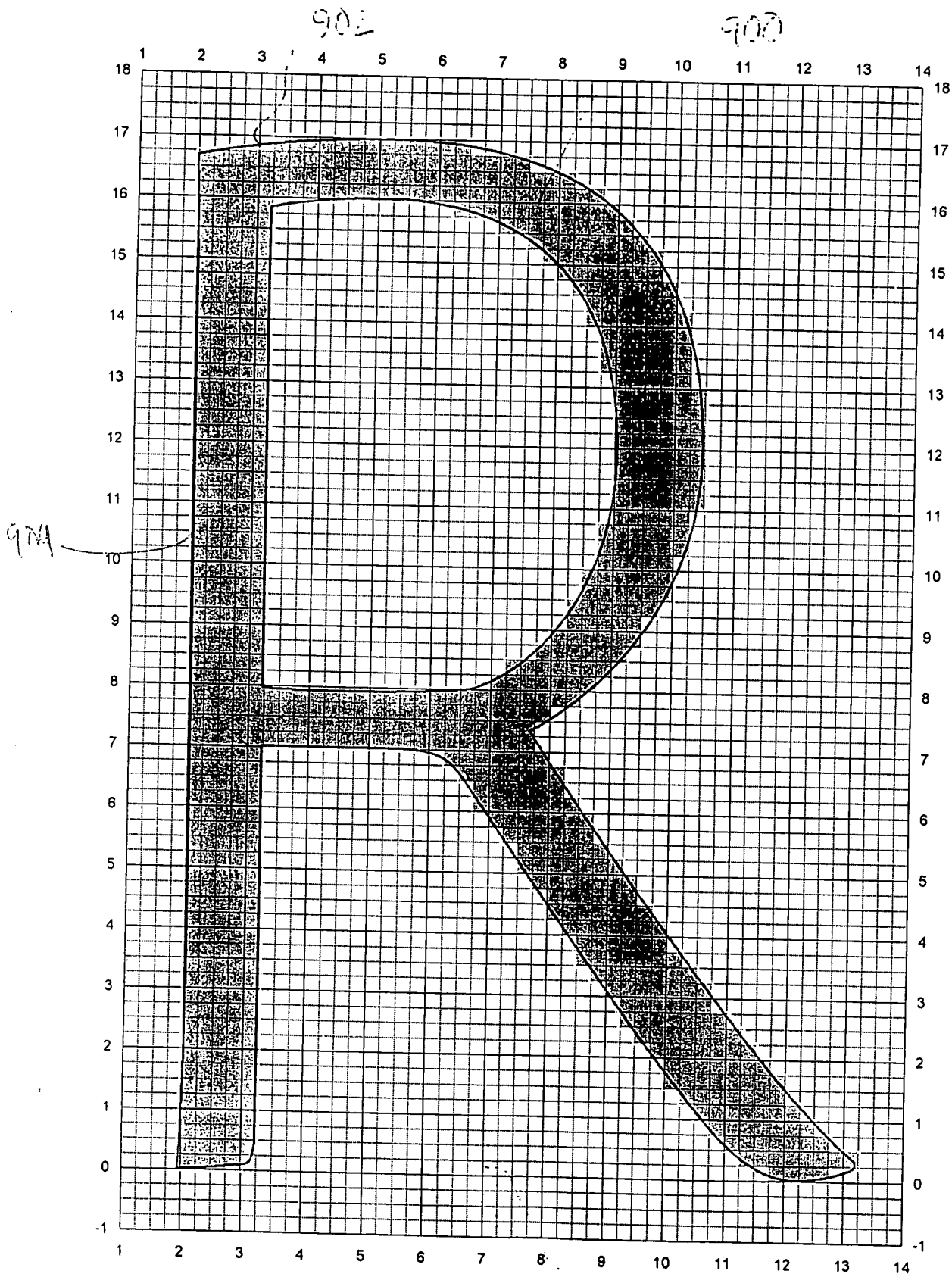
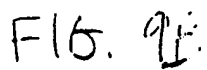
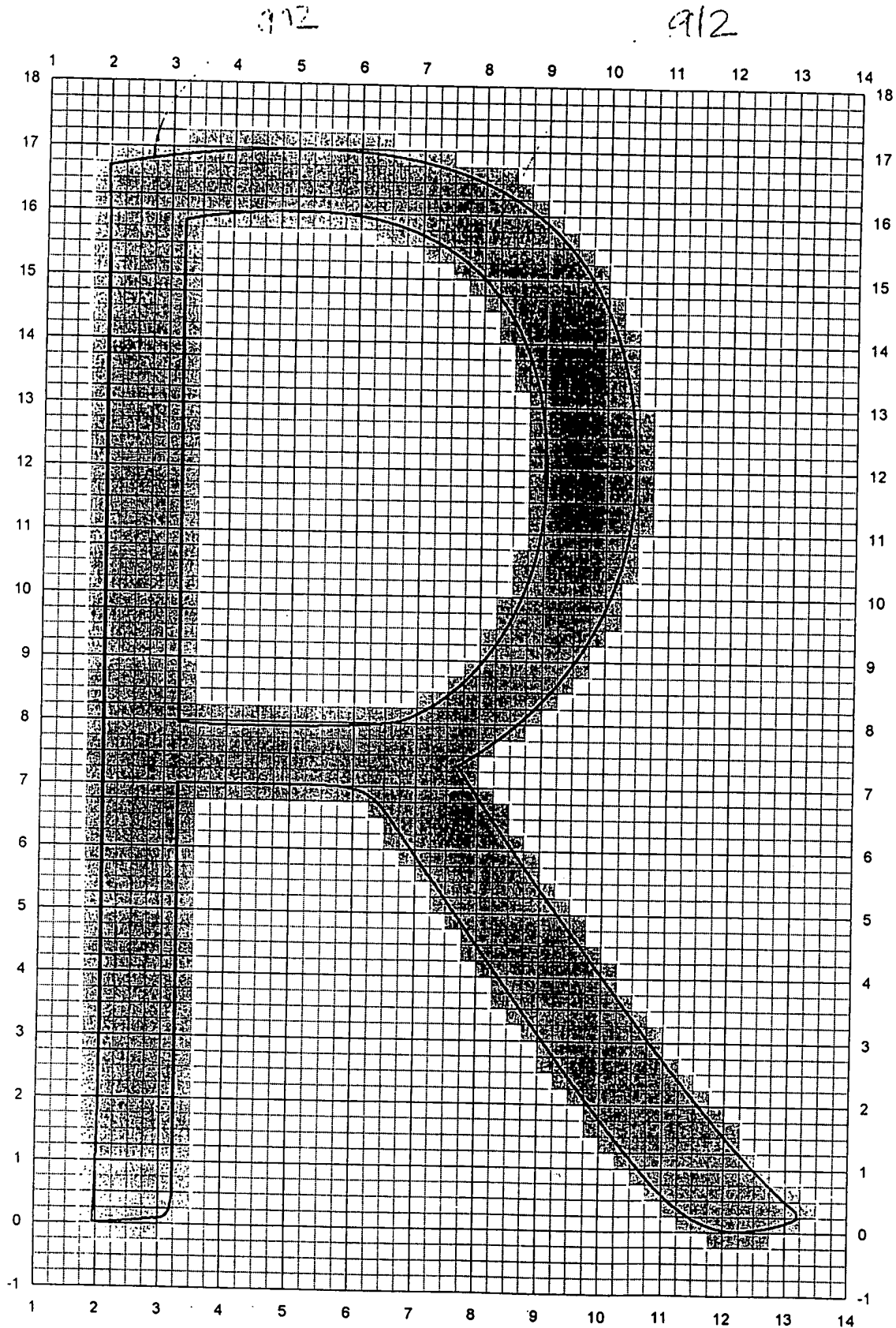
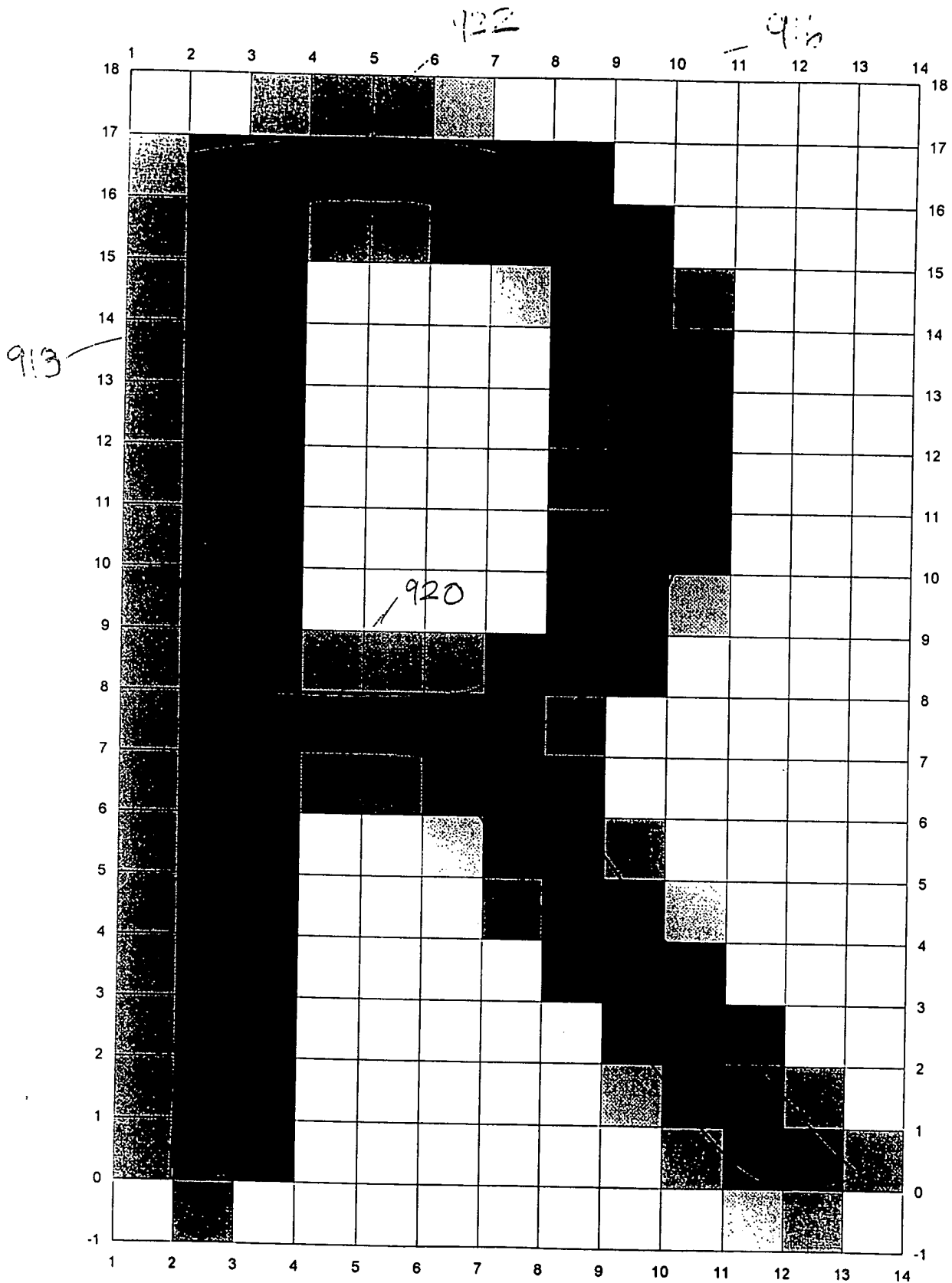


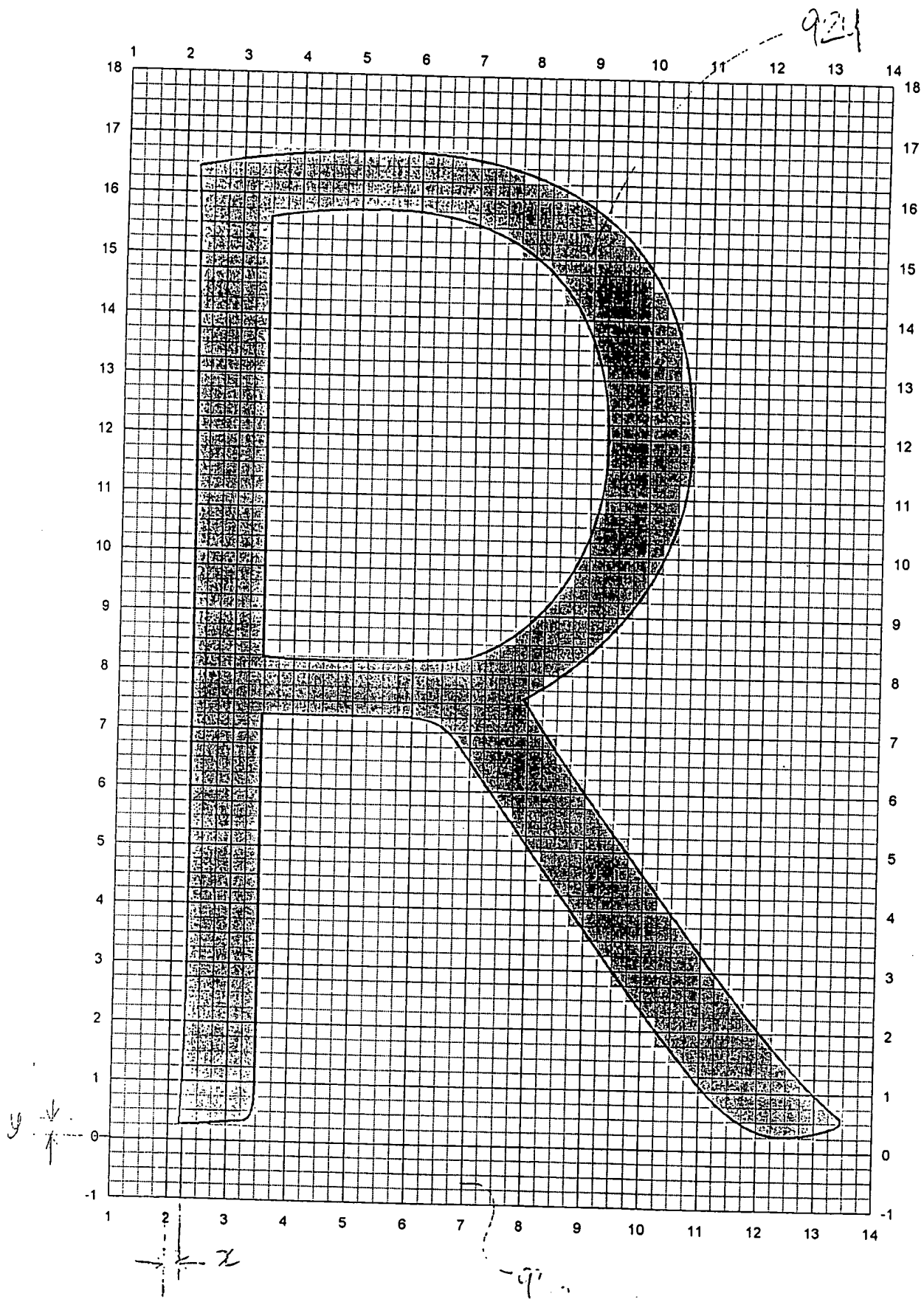
FIG 9A







F16 ID



126

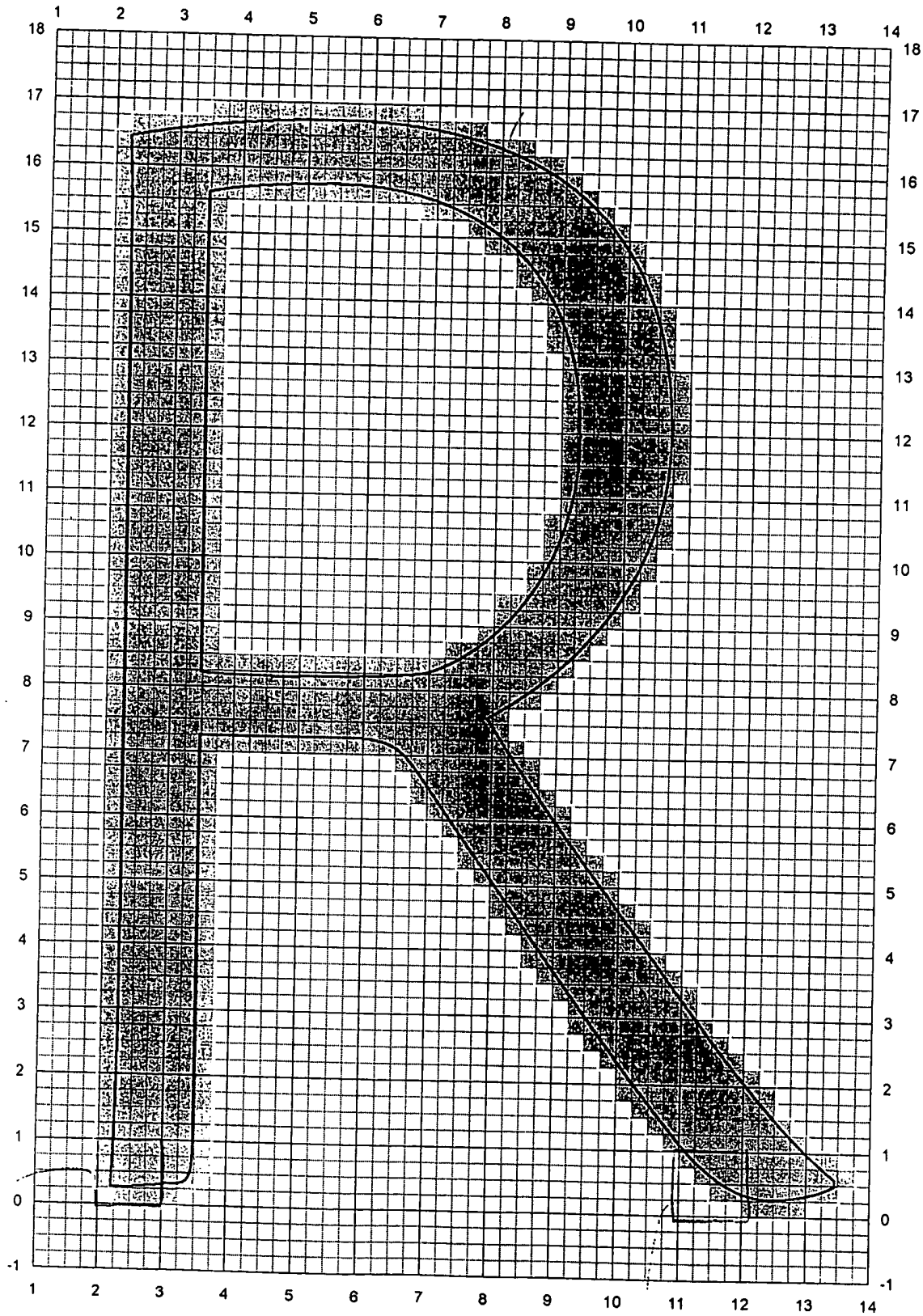


FIG. 9F

150

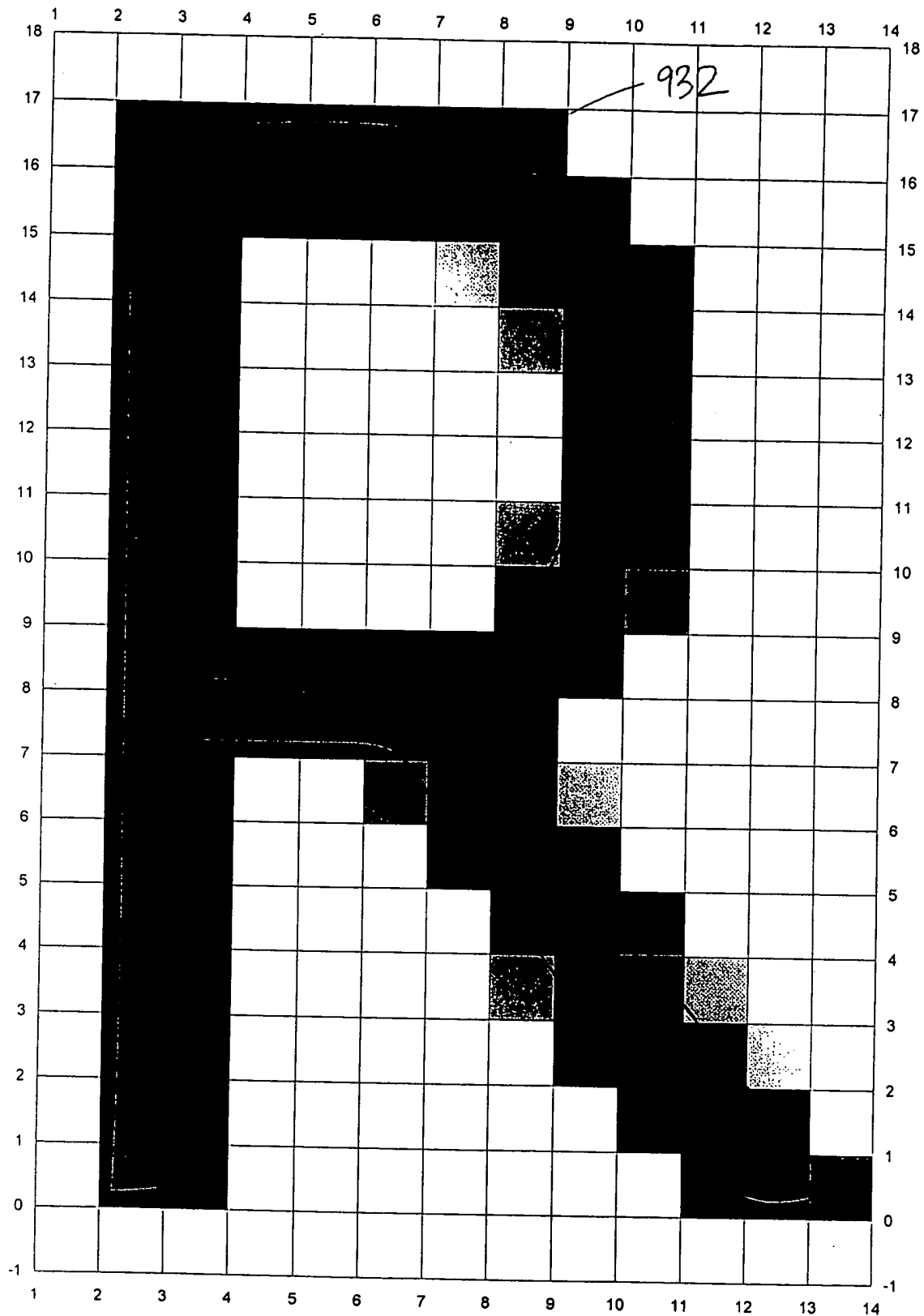


FIG. 15

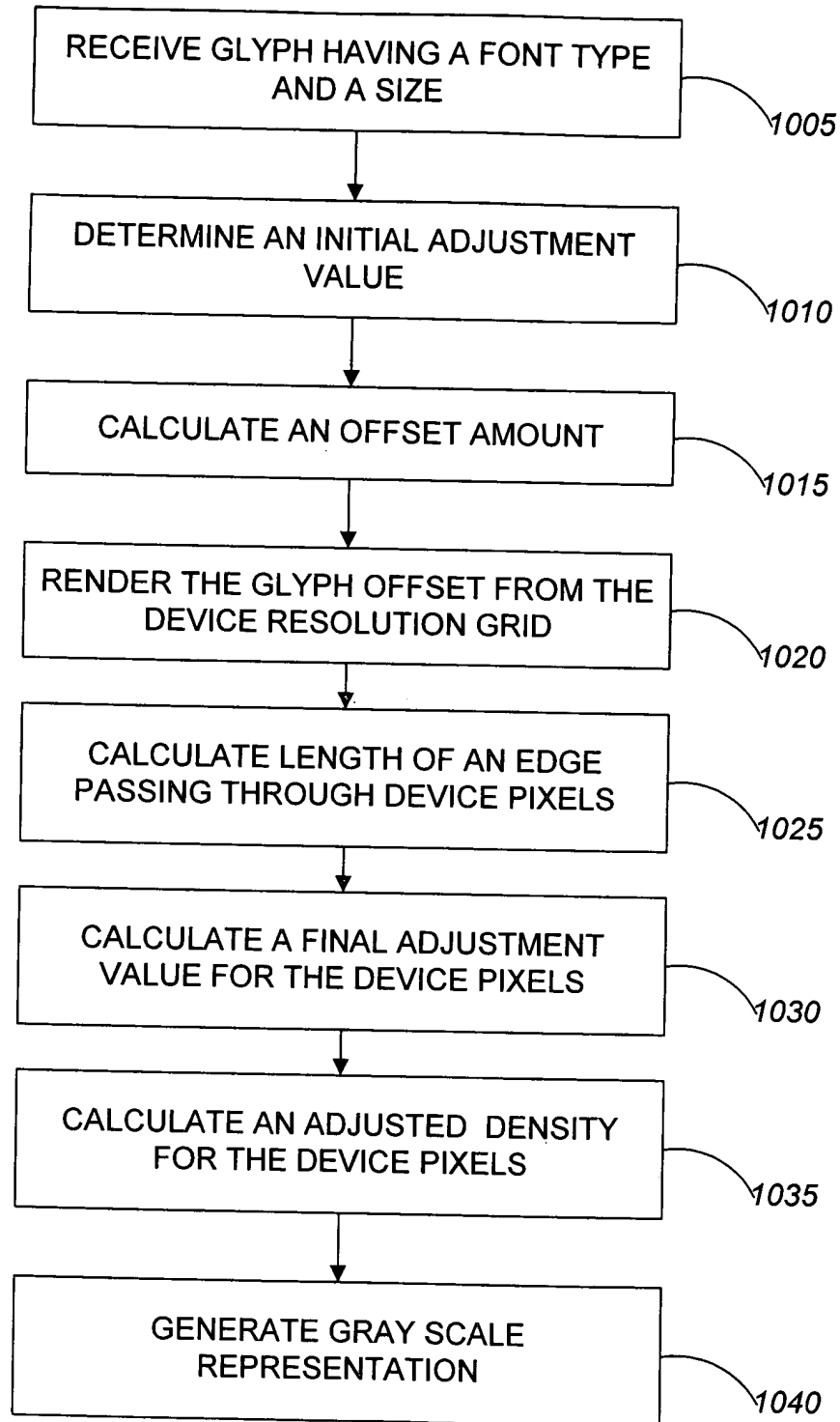
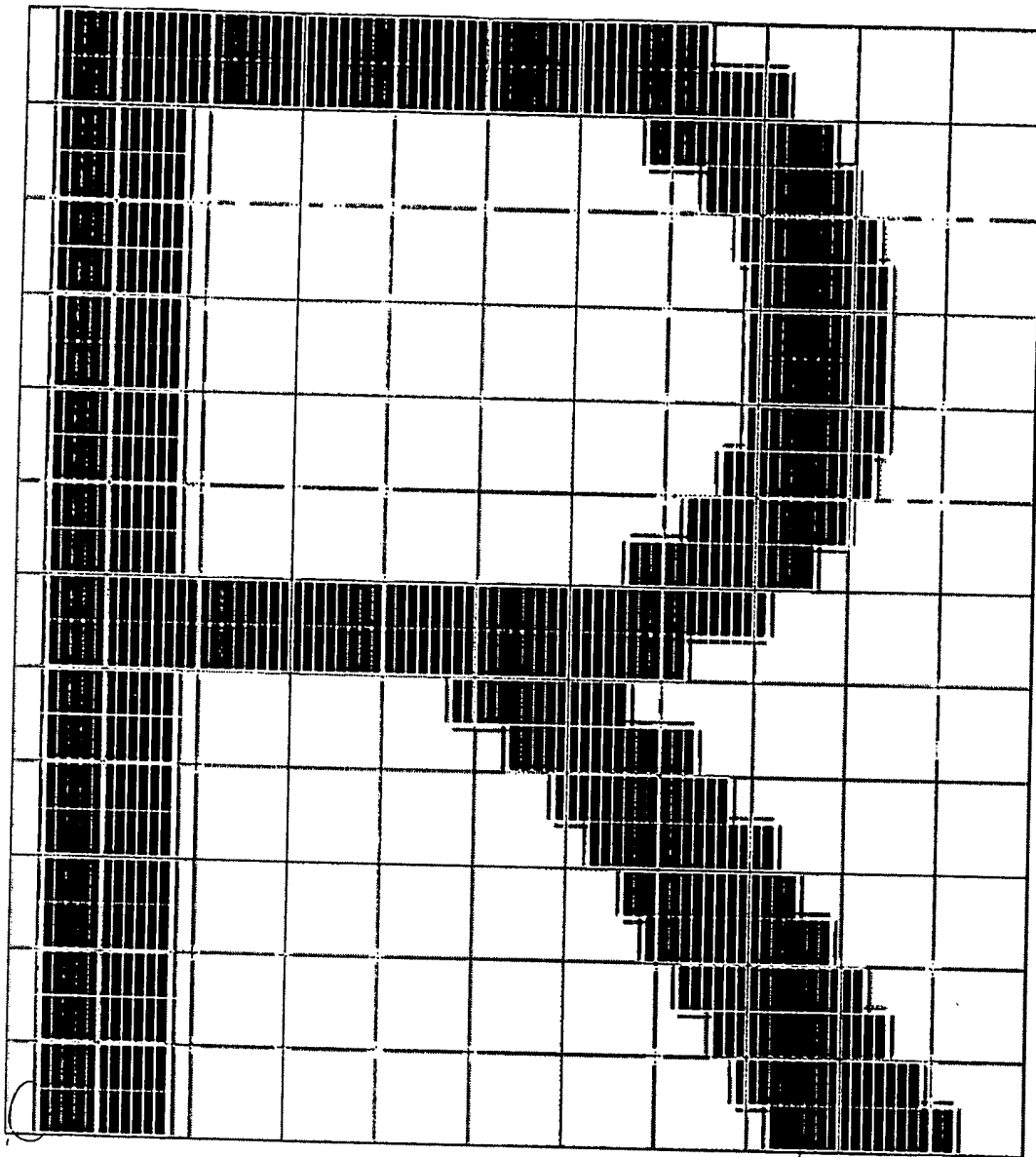


FIG. 10

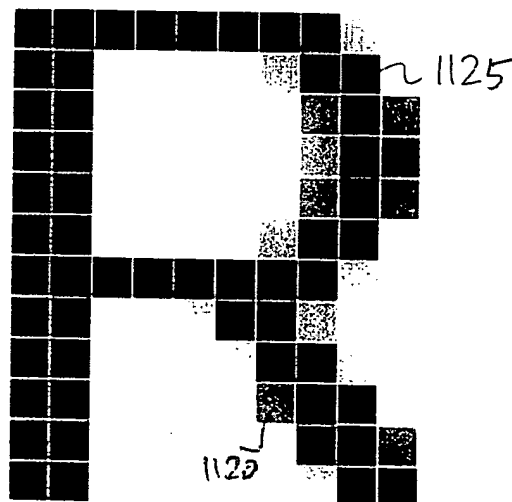
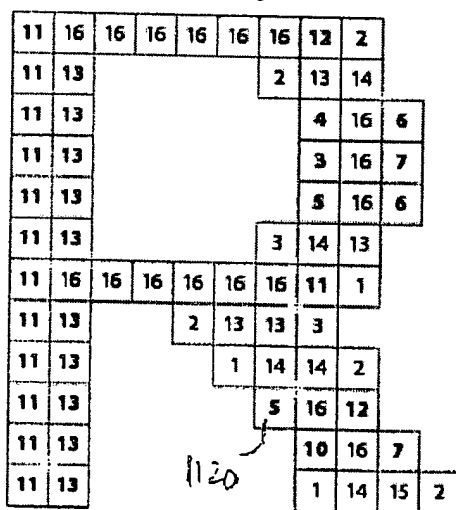
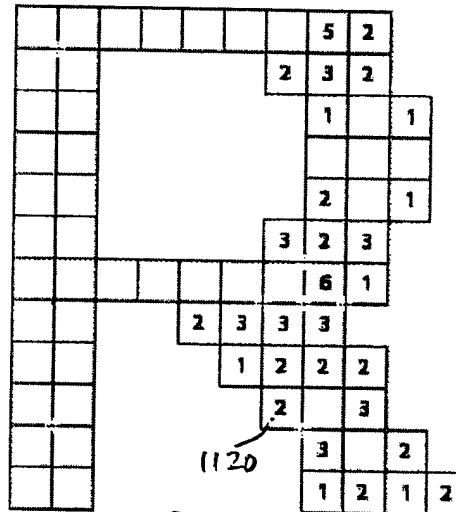
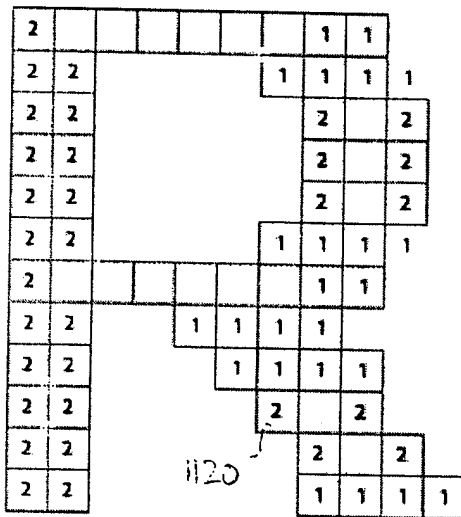
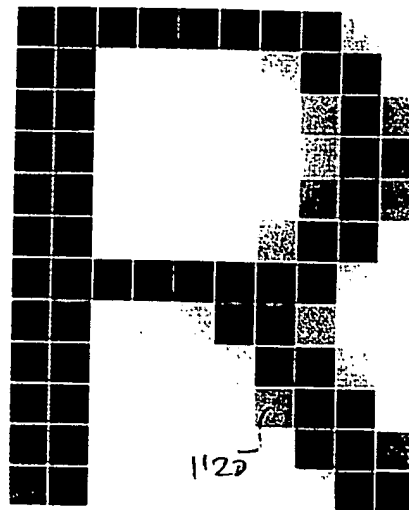
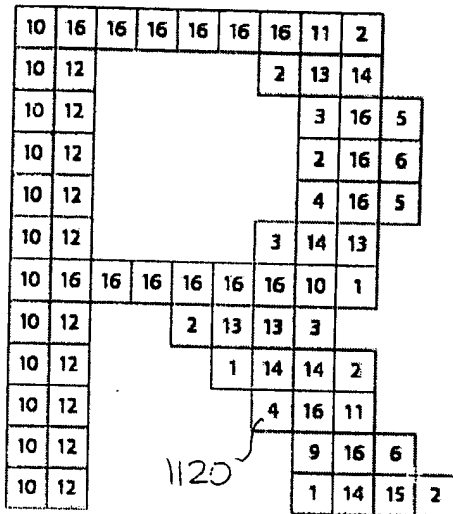


1105

FIG. 11A

1100





1210

1215

1205

| Scaled Stem Width (16ths) | Grid Ratio | Alignment Offset | Darkening Amount (16ths per side) | Asymmetric Darkening | | | | Phase Difference | Rasterized Stem Width (bold lines) and Darkening Amount (light lines), showing both phases |
|---------------------------|------------|------------------|-----------------------------------|----------------------|--------------------------------------|--------------|---------------------------------------|------------------|--|
| | | | | Low Density | Low Density Darkening Amount (16ths) | High Density | High Density Darkening Amount (16ths) | | |
| 1-4 | 4 | 0 | 4 | | | | | 1/4 | |
| 5,6 | 8 | 0 | 4 | 0 | 2 | 24 | 6 | 3/8 | |
| 7,8 | 8 | 0 | 4 | 0 | 2 | 32 | 6 | 1/4 | |
| 9,10 | 8 | 0 | 4 | 0 | 2 | 40 | 6 | 1/8 | |
| 11,12 | 4 | 1 | 4 | | | | | 1/4 | |
| 13,14 | 8 | 1 | 3 | 0 | 4 | 56 | 2 | 1/4 | |
| 15,16 | 8 | 1 | 3 | 8 | 4 | 56 | 2 | 3/8 | |
| 17,18 | 8 | 1 | 2 | | | | | 3/8 | |
| 19,20 | 8 | 1 | 2 | | | | | 1/2 | |
| 21,22 | 8 | 1 | 2 | | | | | 3/8 | |
| 23,24 | 8 | 1 | 2 | | | | | 1/4 | |
| 25 | 8 | 1 | 2 | | | | | 1/8 | |
| 26-28 | 4 | 0 | 1 | 0 | 0 | 12 | 2 | 1/8 | |
| 29,30 | 8 | 1 | 1 | 0 | 2 | 56 | 0 | 1/8 | |
| 31,32 | 8 | 1 | 1 | 8 | 0 | 56 | 2 | 1/8 | |
| 33 | 8 | 1 | 1 | 16 | 0 | 56 | 2 | 1/4 | |
| 34-37 | 4 | 0 | 0 | | | | | 1/4 | |

FIGURE 12